

REMARKS

Reconsideration of the application is requested.

Claims 7-13 remain in the application. Claims 7-13 are subject to examination.

Under the heading "Claim Rejections – 35 USC § 103" on page 2 of the above-identified Office Action, claims 7-13 have been rejected as being obvious over U.S. Patent No. 6,031,705 to Gscheidle in view of U.S. Patent No. 6,172,383 B1 to Williams under 35 U.S.C. § 103. Applicants respectfully traverse.

Williams teaches several embodiments of a voltage clamp (402, 404, 410, 416, 420, 820, and 830). The voltage clamp is designed to break down and allow a current to flow therethrough to prevent the applied gate voltage from damaging the MOSFET 10. Williams teaches placing a resistor R between two branches of opposed diode pairs of the voltage clamp and teaches that the purpose of the resistor R is to limit the current through the branches of the diode pairs and to prevent them from burning up after one of the branches of the diode pairs breaks down (Please see column 5, lines 38-43, and column 6, lines 12-18). Since the resistance value of the resistor R can be rather high, Williams teaches that the resistor R can be broken up into a large resistor R_L and a small resistor R_S connected in series, and that a diode D1 can be placed in parallel with the large resistor R_L . By doing this, the branches of opposed diode pairs of the voltage clamp are protected by the total resistance of the

large resistor R_L and the small resistor R_S , but the turn off time is not influenced by the value of the large resistor R_L (see column 7, lines 12-37).

When one considers the teachings of Gscheidle and Williams as a whole as required by the Graham Factual Inquiries set forth in MPEP 2141 Section II, it should be clear that one of ordinary skill in the art would not have been motivated to modify Gscheidle. The protective device of Williams, namely the branches of the diode pairs of the voltage clamp, operates very differently from the MOSFET T2, T3 configuration taught in Gscheidle. Since the purpose behind the resistor R (and R_L and R_S) in Williams is to limit the current through the branches of the diode pairs of the voltage clamp, and since Gscheidle does not use a voltage clamping circuit including branches of opposed diode pairs, one of ordinary skill in the art would not have been motivated to modify Gscheidle by using the resistor-diode configuration taught by Williams.

Further, claim 7 includes a diode (D2) connected in parallel with said gate resistor (R_v), for conducting current in a direction from said gate (G) to the positive pole (+Vbat1) of the accumulator (Bat1). Neither Gscheidle nor Williams teach such a limitation and therefore even if it would have been obvious to combine the teachings of Gscheidle and Williams, the claimed invention would not have been obtained. The diode D1 shown in Fig. 8A of Williams does not allow the gate current to flow from the gate G' to the positive pole of an accumulator.

Additionally, please note that claim 7 defines a device for protecting an electronic module, and the protection device includes a MOSFET. The protective circuit in Gscheidle does utilize a MOSFET that is switched to a non-conducting state to protect an electronic module. In Williams, however, the MOSFET 10 is the electronic module that is being protected (column 1, line 26 - column 2, line 8). The MOSFET 10 of Williams, rather than being part of a device for protecting an electronic module, is used as a switch to control the flow of power to an instrument such as a portable computer. The protective device of Williams is a voltage clamp comprising opposed diode pairs that are connected to the gate. The embodiments of the voltage clamp (402, 404, 410, 416, 420, 820, and 830) are designed to break down and allow a current to flow therethrough when the applied gate voltage would damage the MOSFET 10. One of ordinary skill in the art would not have obtained a suggestion for an obvious modification to Gscheidle because the entire mode of operation of the voltage clamp circuit in Williams is so radically different from the mode of operation of the MOSFET circuit in Gscheidle.

In view of the foregoing, reconsideration and allowance of claims 7-13 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Appl. No. 10/566,529
Amdt. Dated January 16, 2008
Reply to Office Action of November 15, 2007

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Sterner LLP, No. 12-1099.

Respectfully submitted,

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January 16, 2008

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